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CHEN, QING				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/687,901

Applicant(s)

NAM ET AL.

Examiner

Qing Chen

Art Unit

2191

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

1. This Office action is in response to the RCE filed on July 30, 2008.
2. **Claims 1-5 and 8** are pending.
3. **Claims 1, 2, 4, and 8** have been amended.
4. **Claims 6 and 7** have been cancelled.
5. The objections to Claims 2 and 4 are withdrawn in view of Applicant's amendments to the claims.

Continued Examination Under 37 CFR 1.114

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 30, 2008 has been entered.

Response to Amendment

Claim Objections

7. **Claims 1-3** are objected to because of the following informalities:
 - **Claim 1** contains a typographical error: A comma (,) should be added after the "wherein the home server is a centralized local home server [...]" limitation.

- **Claim 1** recites the limitation “the home appliances.” Applicant is advised to change this limitation to read “the plurality of home appliances” for the purpose of providing it with proper explicit antecedent basis.
 - **Claims 1 and 3** recite the limitation “the Internet.” Applicant is advised to change this limitation to read “the Internet connection” for the purpose of providing it with proper explicit antecedent basis.
 - **Claims 2 and 3** depend on Claim 1 and, therefore, suffer the same deficiencies as Claim 1.
- Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. **Claims 4 and 5** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 4 recites the limitation of a plurality of home servers, wherein each home server is connected to a plurality of home appliances in a local area network. The subject matter is not properly described in the application as filed, since the specification only discloses only one home server (*see Figures 4 and 6; Paragraphs [0040] and [0048]*). The specification lacks disclosure on a plurality of home servers, wherein each home server is connected to a plurality of home appliances in a local area network. Because the specification does not adequately support the claimed subject matter, it would not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 5 depends on Claim 4 and, therefore, suffers the same deficiency as Claim 4.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-3 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,901,320 (hereinafter “**Takahashi**”) in view of US 6,782,527 (hereinafter “**Kouznetsov**”).

As per **Claim 1**, Takahashi discloses:

- a home server reading a system software version of a selected home appliance from among a plurality of home appliances, wherein the system software of the selected home appliance is to be upgraded among said plurality of home appliances, wherein the home server is remotely connected to each of said plurality of home appliances in a local home network, wherein the selected home appliance communicates with the home server (see Figure 1; Column 4: 9-13, *"The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1."* and 28 and 29, *"The versions of the program files for the CPU's 11 in each network element 1 are called a CPU issue each."*; Column 5: 15-20, *"The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22."*),

- wherein the home server is a centralized local home server, which determines which one of said plurality of home appliances connected to the home server in the local home network require a software update without the plurality of home appliances individually making any determination about the software update (see Column 4: 9-13, *"The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1."* and 23-26, *"The database 21 stores in advance a plurality of program files for each of the CPU's 11 in each network element 1 (the database may include program files of different versions to be executed by the same CPU)."* and 52-54, *"One*

configuration file is provided for each network element and is stored in advance in the corresponding database 21.”; Column 5: 15-25, “The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU’s 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22. The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.”),

- the home server reading a latest system software version corresponding to the selected home appliance from the home server (*see Column 5: 20-23, “The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.”*);

- the home sever comparing the system software version of the selected home appliance in the local home network with the latest system software version of a corresponding home appliance in the home server (*see Column 5: 20-23, “The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.”*);

- if the home server determines that the latest system software version of the corresponding home appliance in the home server is newer than the system software version of the selected home appliance in the local home network, downloading the latest system software of the corresponding home appliance from the home server (*see Column 5: 20-25, “The returned CPU issues are compared with the CPU issues in that configuration file of the network element*

to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.” and 57-63, “... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1.”); and

- the home server replacing the system software of the selected home appliance with the downloaded system software through the local home network by copying the downloaded system software from the home server to the selected home appliance (*see Column 5: 57-63, “... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1.”).*

However, Takahashi does not disclose:

- wherein the local home network is a local area network;
- wherein the home server is remotely connected to an appliance company server over an Internet connection; and
- wherein a two-way communication connection is established between the home server and the appliance company server.

Kouznetsov discloses:

- wherein the local home network is a local area network (*see Figure 1: 103*);

- wherein the home server is remotely connected to an appliance company server over an Internet connection (*see Figure 1: 101, 105, and 108*); and
- wherein a two-way communication connection is established between the home server and the appliance company server (*see Figure 1: 101*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kouznetsov into the teaching of Takahashi to include wherein the local home network is a local area network; wherein the home server is remotely connected to an appliance company server over an Internet connection; and wherein a two-way communication connection is established between the home server and the appliance company server. The modification would be obvious because one of ordinary skill in the art would be motivated to distribute software updates for an appliance to a server via a central location (*see Kouznetsov – Column 3: 9-11*).

As per **Claim 2**, the rejection of **Claim 1** is incorporated; however, Takahashi does not disclose:

- wherein the step of reading the system software version of the selected home appliance in the local home network is periodically performed.

Kouznetsov discloses:

- wherein the step of reading the system software version of the selected home appliance in the local home network is periodically performed (*see Column 9: 43-46, “It is contemplated that agent 202 can access server 211 periodically, sporadically, or on demand, for example, to determine if a new script or components require download.”*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kouznetsov into the teaching of Takahashi to include wherein the step of reading the system software version of the selected home appliance in the local home network is periodically performed. The modification would be obvious because one of ordinary skill in the art would be motivated to determine if any program components or scripts have changed (*see Kouznetsov – Column 9: 40-43*).

As per **Claim 3**, the rejection of **Claim 1** is incorporated; however, Takahashi does not disclose:

- wherein the step of reading the latest system software version corresponding to the selected home appliance from the appliance company server is periodically performed through the Internet connection.

Kouznetsov discloses:

- wherein the step of reading the latest system software version corresponding to the selected home appliance from the appliance company server is periodically performed through the Internet connection (*see Column 9: 43-46, "It is contemplated that agent 202 can access server 211 periodically, sporadically, or on demand, for example, to determine if a new script or components require download."*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kouznetsov into the teaching of Takahashi to include wherein the step of reading the latest system software version corresponding to the selected home appliance from the appliance company server is periodically performed through

the Internet connection. The modification would be obvious because one of ordinary skill in the art would be motivated to determine if any program components or scripts have changed (*see Kouznetsov – Column 9: 40-43*).

As per **Claim 8**, Takahashi discloses:

- determining a first version of a software code locally available to a first appliance connected in a home network locally connected to a home server (*see Figure 1; Column 4: 9-13, “The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1.” and 28 and 29, “The versions of the program files for the CPU's 11 in each network element 1 are called a CPU issue each.”; Column 5: 15-20, “The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22.”*);
- determining a second version of a software code designated for the first appliance and remotely available for the first appliance (*see Column 5: 20-23, “The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.”*);
- downloading the second version of the software code by way of the home server, in response to the home server determining that the second version of the software code is newer than the first version of the software code (*see Column 5: 20-25, “The returned CPU issues are*

compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.” and 57-63, “... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1.”); and

- the home server replacing the first version stored on the first appliance with the second version (*see Column 5: 57-63, “... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1.”*),

- wherein the first and second determining steps, and the downloading and the replacing steps for each of the plurality of appliances in the home network are performed by the home server (*see Figure 1; Column 4: 9-13, “The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1.”*), and

- wherein the home server is a centralized local home server, which determines which one of said plurality of appliances connected to it in the home network require a software update (*see Column 4: 9-13, “The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control*

intelligence) 2 for centrally monitoring and controlling these network elements 1.” and 23-26, “The database 21 stores in advance a plurality of program files for each of the CPU’s 11 in each network element 1 (the database may include program files of different versions to be executed by the same CPU).” and 52-54, “One configuration file is provided for each network element and is stored in advance in the corresponding database 21.”; Column 5: 15-25, “The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU’s 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22. The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.”).

However, Takahashi does not disclose:

- a remote server connected to the home server over a remote connection; and
- wherein a two-way communication connection is established between the home server and the remote server.

Kouznetsov discloses:

- a remote server connected to the home server over a remote connection (*see Figure 1: 101, 105, and 108*); and
- wherein a two-way communication connection is established between the home server and the remote server (*see Figure 1: 101*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kouznetsov into the teaching of Takahashi to include a remote server connected to the home server over a remote connection; and wherein a two-way communication connection is established between the home server and the remote server. The modification would be obvious because one of ordinary skill in the art would be motivated to distribute software updates for an appliance to a server via a central location (see Kouznetsov – Column 3: 9-11).

12. **Claims 4 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **US 2002/0012347** (hereinafter “**Fitzpatrick**”) in view of **Kouznetsov** and **Takahashi**.

As per **Claim 4**, Fitzpatrick discloses:

- broadcasting upgrade information of a system software of home appliances from an appliance company server, wherein the appliance company server is connected to a plurality of home appliances in a local area network over a remote network connection (see *Figures 1 and 6; Paragraph [0024]*, “The system 100 includes a service provider head end 10, remote server 48, Internet 44, audio/visual devices 26, Internet appliances 28, television 24, set-top box (“STB”) 22, and remote control 36.”; *Paragraph [0059]*, “FIG. 10 is a flowchart of a STB process 430 of retrieving an upgrade within the STB using data carousels in the embodiment. In operation, when an upgrade is available (step 402), the upgrade server of the cable head end 10 transmits the download descriptor carousel throughout the cable network 11 to STBs 200 (step 404).”);

- the home appliance selecting a system software of a home appliance to be updated from the broadcast (see Paragraph [0059], “FIG. 10 is a flowchart of a STB process 430 of retrieving an upgrade within the STB using data carousels in the embodiment. In operation, when an upgrade is available (step 402), the upgrade server of the cable head end 10 transmits the download descriptor carousel throughout the cable network 11 to STBs 200 (step 404).” and “If linked descriptor is located in the descriptor carousel, it is downloaded and decoded to determine which module carousel will contain module upgrades for the STB (step 414) (for the particular STB model or software version).”);

- the home appliance downloading the selected system software from the appliance company server to the home appliance through Internet (see Paragraph [0059], “When the module carousel matches one in the descriptor file, the STB waits for the corresponding modules of the module carousel, downloads, and installs them (steps 420 and 422). The STB 200 may generate an acknowledgment message when it successfully completes installation of all the modules associated with a descriptor file (steps 424 and 426).”); and

- the home appliance replacing the system software of the home appliance at home with the downloaded system software by copying the downloaded system software from the appliance company server to the home appliance over the local home network (see Paragraph [0059], “When the module carousel matches one in the descriptor file, the STB waits for the corresponding modules of the module carousel, downloads, and installs them (steps 420 and 422). The STB 200 may generate an acknowledgment message when it successfully completes installation of all the modules associated with a descriptor file (steps 424 and 426).”), and

- wherein a two-way communication connection is established between the home appliance and the appliance company server (*see Figure 1: 20*).

However, Fitzpatrick does not disclose:

- a plurality of home servers, wherein each home server is connected to a plurality of home appliances in a local area network and to the appliance company server over a remote network connection;

- wherein the home server is connected to the home appliance in a local home network; and

- wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update.

Kouznetsov discloses:

- a plurality of home servers, wherein each home server is connected to a plurality of home appliances in a local area network and to the appliance company server over a remote network connection (*see Figure 1: 101, 103-105, 108, and 117*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kouznetsov into the teaching of Fitzpatrick to include a plurality of home servers, wherein each home server is connected to a plurality of home appliances in a local area network and to the appliance company server over a remote network connection. The modification would be obvious because one of ordinary skill in the art would be motivated to upgrade system software of home appliances in different home networks.

Takahashi discloses:

- wherein the home server is connected to the home appliance in a local home network (see Figure 1); and

- wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update (see Column 4: 9-13, "The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1." and 23-26, "The database 21 stores in advance a plurality of program files for each of the CPU's 11 in each network element 1 (the database may include program files of different versions to be executed by the same CPU)." and 52-54, "One configuration file is provided for each network element and is stored in advance in the corresponding database 21."; Column 5: 15-25, "The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22. The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Takahashi into the teaching of Fitzpatrick to include wherein the home server is connected to the home appliance in a local home network; and wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update. The modification would

be obvious because one of ordinary skill in the art would be motivated to provide a centralized surveillance and control of software updates for the set top boxes (*see Takahashi – Column 1: 49-52*).

As per **Claim 5**, the rejection of **Claim 4** is incorporated; and Fitzpatrick further discloses:

- wherein the home server is a set top box connected to a digital television receiver (*see Paragraph [0026], “The STB 22 may be coupled to the TV 24 ...”*).

Response to Arguments

13. Applicant’s arguments filed on July 30, 2008 have been fully considered, but they are not persuasive.

In the Remarks, Applicant argues:

a) Takahashi, however, fails to disclose all of the above noted elements and further teaches away from them. That is, according to Takahashi, a direct link is established between each device (i.e., CPU) and the server that provides the updated programs. More particularly, Takahashi teaches away from using a local area server as a central unit which determines the availability of updates for each of the appliances in a local network. In other words, according to Takahashi, each device is responsible for separately and individually performing the above enumerated 3 tasks. Instead, in the claimed invention, the responsibility of performing those tasks are delegated to the local area server. The applicant has thoroughly reviewed the teachings

of Takahashi and respectfully notes that Takahashi does not suggest any of the above noted structural and functional elements.

Examiner's response:

a) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, without acquiesce to the Applicant's assertion that Takahashi teaches away from using a local area server as a central unit which determines the availability of updates for each of the appliances in a local network, the Examiner first submits that the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without presenting supporting arguments pointing out the specific distinctions believed to render the claims patentable over the applied references. Applicant fails to present any argument against the Examiner's interpretation of the claims and specifically point out the details in Takahashi that support the Applicant's assertion that in Takahashi, "each device is responsible for separately and individually performing the [...] 3 tasks." Mere statements concluding that the prior art does not disclose or suggest a particular claim limitation without any supporting argument or evidence is a general allegation.

Second, with respect to the Applicant's assertion that Takahashi teaches away from using a local area server as a central unit which determines the availability of updates for each of the appliances in a local network, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that Takahashi clearly discloses using a local area server/home server as a central unit which determines the

availability of updates for each of the appliances in a local network (*see Column 4: 9-13, "The system illustratively comprises a plurality of network elements (NE's) 1 such as optical multiplex transmitters and a monitoring apparatus (monitoring and control intelligence) 2 for centrally monitoring and controlling these network elements 1."* and 23-26, "*The database 21 stores in advance a plurality of program files for each of the CPU's 11 in each network element 1 (the database may include program files of different versions to be executed by the same CPU)." and 52-54, "One configuration file is provided for each network element and is stored in advance in the corresponding database 21."*; Column 5: 15-25, "*The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22. The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1."*). Note that the monitoring apparatus (local area server/home server) is used to centrally monitor and control the network elements. Further note that the monitoring apparatus compares the CPU issues that are executed by the CPU with the CPU issues in a configuration file stored in the monitoring apparatus' database to detect whether a change has been made. Thus, one of ordinary skill in the art would readily recognize that the monitoring apparatus is a central unit which determines the availability of updates for each of the network elements in the local network.

Third, Examiner further submits that using a local area server/home server to determine the availability of updates for each of the appliances in a local network is well-known to one of

ordinary skill in the computing art and also conventional in the areas of computer networking and software updating. Applicant has already submitted in the “Background of the Invention” section of the specification that the process of upgrading system software of a home appliance by a user accessing a home appliance company server through the Internet using a personal computer is admitted prior art (*see Figure 1; Paragraph [0009]*). Furthermore, Takahashi discloses in the “Background of the Invention” section that a monitoring apparatus provides CPU-wise program version management (*see Column 1: 55-57*). Takahashi further discloses that the conventional version management of the programs transferred to the network elements involves having the monitoring apparatus check the versions of the programs for each of the CPU’s (*see Column 1: 63-66*). Furthermore, by way of an example and not of limitation, the various patent and non-patent literatures cited by the Examiner are all related to, one form or another, the concept of upgrading an appliance/device by downloading the latest system software of the appliance/device using a server.

Fourth, without acquiesce to the Applicant’s assertion that Takahashi does not suggest any of the noted structural and functional elements, the Examiner first submits that the Applicant’s arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without presenting supporting arguments pointing out the specific distinctions believed to render the claims patentable over the applied references. Mere statements concluding that the prior art does not disclose or suggest a particular claim limitation without any supporting argument or evidence is a general allegation.

Fifth, with respect to the Applicant’s assertion that Takahashi does not suggest any of the noted structural and functional elements, as previously pointed out in the Final Rejection (mailed

on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that Takahashi clearly discloses the following structural elements:

- a home server (*see Figure 1: 2*);
- a selected home appliance (*see Figure 1: 1*);
- a plurality of home appliances (*see Figure 1*);
- a local home network (*see Figure 1*); and
- a centralized local home server (*see Figure 1: 2*).

Examiner further submits that Takahashi clearly discloses the following functional elements:

- reading a system software version of a selected home appliance from among a plurality of home appliances (*see Column 5: 15-20, "The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22."*);
- determining which one of said plurality of home appliances connected to the home server in the local home network require a software update, without the home appliances individually making any determination about the software update (*see Column 5: 15-25, "The management means 22 first issues a command (e.g., RTRV-FILE-NVM) prompting the network element 1 to transfer the CPU issues of the programs being executed by the CPU's 11. In response, the network element 1 returns the CPU issues of the currently executing programs to the management means 22."*

The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.

Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.”);

- reading a latest system software version corresponding to the selected home appliance from the home server (see Column 5: 20-23, “*The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.*”);

- comparing the system software version of the selected home appliance in the local home network with the latest system software version of a corresponding home appliance in the home server (see Column 5: 20-23, “*The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made.*”);

- if the latest system software version of the corresponding home appliance in the home server is newer than the system software version of the selected home appliance in the local home network, downloading the latest system software of the corresponding home appliance from the home server (see Column 5: 20-25, “*The returned CPU issues are compared with the CPU issues in that configuration file of the network element to which a change of the program version has been made. Upon comparison, the changed program file is selected as the program to be transferred to the network element 1.*” and 57-63, “... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the

configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1."); and

- replacing the system software of the selected home appliance with the downloaded system software through the local home network by copying the downloaded system software from the home server to the selected home appliance (see Column 5: 57-63, "... the transfer means 23 retrieves from the database 21 the program file selected by the management means 22 as well as the configuration file in which the program file version has been changed, generates download data in which the program file and the configuration file are set, and transfers the download data to the network element 1.").

Therefore, for at least the reasons set forth above, the rejections made under 35 U.S.C. § 103(a) with respect to Claims 1 and 8 are proper and therefore, maintained.

In the Remarks, Applicant argues:

b) Kouznetsov fails to cure the deficiencies of Takahashi. Col. 6 lines 40-49 and Fig. 2 of Kouznetsov disclose "a software-implemented agent 202 executes on the computing devices within the appliance 117. Agent 202 performs a relatively small number of functions in the application management solution in accordance with the present invention. First, agent 202 establishes a frequent connection with application management server 108 to check for updates in code and/or data used to provide the application services. When appropriate, agent 202 downloads updated code into memory and/or storage devices within appliance 117." A review of

the passage above reveals that agent 202 is executed within the appliance 117. Therefore, in the same way as Takahashi, each appliance is connected to the application manager server such that the application manager server directly sends updates to the appliance. As such, as noted above with respect to Takahashi, each appliance in Kouznetsov is individually responsible for requesting, downloading, and replacing the software of the appliance through the network. The connect server 105 of Kouznetsov does not perform any of the 3 enumerated functions as claimed.

Examiner's response:

b) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, without acquiesce to the Applicant's assertion that each appliance in Kouznetsov is individually responsible for requesting, downloading, and replacing the software of the appliance through the network, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that Kouznetsov is relied upon by the Examiner for its specific teaching of the particular claim limitations "wherein a home server is remotely connected to an appliance company server over an Internet connection" and "wherein a two-way communication connection is established between the home server and the appliance company server." Notably, Kouznetsov discloses a home server that is connected to an appliance company server via the Internet (*see Figure 1: 101, 105, and 108*). Takahashi clearly discloses using a local area server/home server as a central unit which determines the availability of updates for each of the appliances in a local network as discussed hereinabove and thus,

Applicant's argument regarding each appliance in Kouznetsov is individually responsible for requesting, downloading, and replacing the software of the appliance through the network is, at best, moot. Thus, in view of the teaching of Kouznetsov and the state of the art, one of ordinary skill in the art would be motivated to incorporate an appliance company server and connect it, via the Internet, to the monitoring apparatus in Takahashi's invention in order to distribute software updates for an appliance to a server via a central location (*see Kouznetsov – Column 3: 9-11*).

Second, Examiner further submits that connecting a local area server/home server to an appliance company server via the Internet is well-known to one of ordinary skill in the computing art and also conventional in the areas of computer networking and software updating. Applicant has already submitted in the "Background of the Invention" section of the specification that the process of upgrading system software of a home appliance by a user accessing a home appliance company server through the Internet using a personal computer is admitted prior art (*see Figure 1; Paragraph [0009]*). Furthermore, by way of an example and not of limitation, a centralized server computer is widely used by software companies to store software updates and thus, allowing them to be distributed to its customers via the Internet.

Third, Examiner further submits that Takahashi is within the field of the Applicant's endeavor and hence is analogous prior art because Takahashi's invention is directed to a communication system comprising a plurality of network elements and a monitoring apparatus for centrally monitoring and controlling these network elements (*see Abstract*). Kouznetsov is also within the field of the Applicant's endeavor and hence is analogous prior art because Kouznetsov's invention is directed to a method of providing a set of desired application

functions to a plurality of network-coupled computing appliances (*see Abstract*). Therefore, it is permissible to combine the teaching of Kouznetsov into the teaching of Takahashi to include the limitations disclosed by Kouznetsov since Kouznetsov provides a reason for combining the elements in the manner claimed. See MPEP § 2141.01(a).

Therefore, for at least the reasons set forth above, the rejections made under 35 U.S.C. § 103(a) with respect to Claims 1 and 8 are proper and therefore, maintained.

In the Remarks, Applicant argues:

c) Additionally, the Office Action states that elements 101, 105, and 108 of Fig. 1 of Kouznetsov disclose "wherein a home server is connected to an appliance company server over an Internet," as recited in amended claim 1. Applicant submits that element 101 of Kouznetsov discloses a network infrastructure, such as the Internet. Additionally, element 108 discloses an application management server. Applicant respectfully submits that connect server 105 cannot teach or suggest a home server as recited in claim 1, particularly for the following reason. Col. 5 lines 28-31 of Kouznetsov disclose that "connect servers 105 are implemented by connection sharing software such as Microsoft Internet connection sharing service (ICS) or by software such as found in routers." Applicant submits that connection sharing software is not the same as a home server recited in claim 1. As recited in claim 1, "the home server is a centralized local home server, which determines which one of said plurality of home appliances connected to the home server in the local home network require a software update." Kouznetsov fails to teach or suggest that the connect servers determine which one of a said plurality of home appliances require a software update. Applicant submits that the connect server disclosed in Kouznetsov is

simply a device which allows a plurality of appliances to share a network connection. Therefore, in addition to the reasons presented above, Kouznetsov cannot teach or suggest "wherein a home server is connected to an appliance company server over an Internet," as recited in amended claim 1. The applicant has thoroughly reviewed the teachings of Kouznetsov and respectfully notes that Takahashi does not suggest any of the above noted structural and functional elements either.

Examiner's response:

c) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, without acquiesce to the Applicant's assertion that the connect server cannot teach or suggest a home server, the Examiner first submits that Takahashi, as clarified hereinabove, clearly discloses a home server, "which determines which one of said plurality of home appliances connected to the home server in the local home network require a software update."

Second, with respect to the Applicant's assertion that the connect server cannot teach or suggest a home server, the Examiner respectfully submits that one of ordinary skill the art would readily recognize that the connect server is structurally and functionally equivalent to the claimed home server. Figure 1 of Kouznetsov clearly illustrates the connect server and the various network appliances coupled together in a LAN. Likewise, the LAN configuration shown in Figure 2 of the instant application is identical to that of Kouznetsov. Thus, the connect server is structurally equivalent to the claimed home server. Furthermore, since the connect server and the claimed home server are structurally equivalent, one of ordinary skill in the art would readily

comprehend that the connect server and the claimed home server have the same general function in their respective network configurations (*i.e.*, managing the appliances in the network). In addition, as pointed out by the Applicant, Kouznetsov discloses that the “connect servers are implemented by connection sharing software such as Microsoft Internet connection sharing service (ICS) or by software such as found in routers.” One of ordinary skill in the art would readily comprehend that Microsoft Internet connection sharing service (ICS) and router software are software used by a server computer to manage the LAN by administering the network connections. Likewise, the claimed home server manages the local home network in the claimed invention. Thus, the connect server is also functionally equivalent to the claimed home server.

Third, without acquiesce to the Applicant’s assertion that Kouznetsov fails to teach or suggest that the connect servers determine which one of a plurality of home appliances require a software update, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that Kouznetsov is relied upon by the Examiner for its specific teaching of a home server that is connected to an appliance company server via the Internet. Notably, Kouznetsov discloses a home server that is connected to an appliance company server via the Internet (*see Figure 1: 101, 105, and 108*). Takahashi clearly discloses using a local area server/home server to determine which one of a plurality of home appliances require a software update as discussed hereinabove and thus, Applicant’s argument regarding Kouznetsov fails to teach or suggest that the connect servers determine which one of a plurality of home appliances require a software update is, at best, moot. Thus, in view of the teaching of Kouznetsov and the state of the art, one of ordinary skill in the art would be motivated to incorporate an appliance company server and connect it, via the Internet, to the

monitoring apparatus in Takahashi's invention in order to distribute software updates for an appliance to a server via a central location (*see Kouznetsov – Column 3: 9-11*).

Therefore, for at least the reasons set forth above, the rejections made under 35 U.S.C. § 103(a) with respect to Claims 1 and 8 are proper and therefore, maintained.

In the Remarks, Applicant argues:

d) Applicant respectfully submits that prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining the teachings." In re Sernaker, 217 USPQ 1, 6 (Fed. Cir. 1983). Further, it is well settled that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Since obviousness may not be established by hindsight reconstruction or conjecture, Applicant invites the Examiner to point out the alleged motivation to combine with specificity, or alternatively provide a reference or affidavit in support thereof pursuant to MPEP § 2144.03.

Examiner's response:

d) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, with respect to the Applicant inviting the Examiner to point out the alleged motivation to combine with specificity, as previously pointed out in the Non-Final Rejection (mailed on 09/11/2007) and the Final Rejection (mailed on 03/31/2008) and further clarified

hereinafter, the Examiner respectfully submits that a motivation to incorporate the teaching of Takahashi into the teaching of Fitzpatrick to include “wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update” along with the source of the motivation are clearly stated in the Non-Final Rejection (mailed on 09/11/2007), the Final Rejection (mailed on 03/31/2008), and the instant Non-Final Rejection. The modification would be obvious because one of ordinary skill in the art would be motivated to provide a centralized surveillance and control of software updates for the set top boxes (*see Takahashi – Column 1: 49-52*). Thus, the motivation to combine is found in the cited prior art.

Second, with respect to the Applicant inviting the Examiner to alternatively provide a reference or affidavit in support of the motivation pursuant to MPEP § 2144.03, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that MPEP § 2144.03 is directed to the Examiner’s taking of Official Notice when making a rejection. Since no Official Notice was taken by the Examiner with regard to the rejections of Claims 4 and 5, the requirements of MPEP § 2144.03 do not apply and thus, the Examiner does not have to provide a reference or affidavit pursuant to MPEP § 2144.03. Furthermore, Examiner respectfully submits MPEP §§ 2144.03 and 2144.03(C) with emphasis added for purposes of convenience in discussion and illustration:

MPEP § 2144.03 Reliance on Common Knowledge in the Art or “Well Known” Prior Art

In *certain< circumstances >where appropriate<, ** an examiner *may< take official notice of facts not in the record or * rely on “common knowledge” in making a rejection, however such rejections should be judiciously applied.

MPEP § 2144.03(C) If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding With Adequate Evidence

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241 (“[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention.”). A general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate. **If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained.** See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

According to the sections of the MPEP provided above, the Examiner would like to point out that an Examiner may take Official Notice in making a rejection. However, the Examiner must provide documentary evidence in response to the Applicant's adequate traversal of the Examiner's assertion of Official Notice. Again, since no Official Notice was taken by the Examiner with regard to the rejections of Claims 4 and 5, a reference or affidavit pursuant to MPEP § 2144.03 is not warranted.

Therefore, for at least the reasons set forth above, the rejection made under 35 U.S.C. § 103(a) with respect to Claim 4 is proper and therefore, maintained.

In the Remarks, Applicant argues:

e) The Office Action states that Takahashi does not teach a home server connected to an appliance company server over an Internet and a two-way communication connection established between the home server and the appliance server. Thus, Takahashi does not intend for the monitoring apparatus to establish a two-way communication connection with an appliance server. Rather, Takahashi intends for the monitoring apparatus to store "in advance a plurality of program files for each of the CPU's in each network element." (Takahashi, Col. 4 lines 23-25). On the contrary, Fitzpatrick teaches downloading program code from a remote source directly to a set-top- box (STB) and determining whether the downloaded data is a match for the STB and should be installed (Fitzpatrick par. [0059]).

As such, Takahashi does not provide a motivation to combine with Fitzpatrick because Takahashi requires the monitoring apparatus to store in advance a plurality of program files for each CPU, unlike Fitzpatrick which downloads information and determines whether the downloaded data should be installed. Applicant submits that there is no indication in the Office Action, how such combination is possible, as the two systems are independently complex and cannot be easily modified to work with each other. As such, no portions of the cited references provide a suggestion or motivation for combining the references in a manner that would make the invention as recited in claims 4-7 obvious.

Examiner's response:

c) Examiner disagrees. Applicant's arguments are not persuasive for at least the following reasons:

First, without acquiesce to the Applicant's assertion that Takahashi does not provide a motivation to combine with Fitzpatrick because Takahashi requires the monitoring apparatus to store in advance a plurality of program files for each CPU, unlike Fitzpatrick which downloads information and determines whether the downloaded data should be installed, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner respectfully submits that Takahashi is relied upon by the Examiner for its specific teaching of the particular claim limitation "wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update." Notably, as discussed hereinabove, Takahashi discloses using a local area server/home server as a central unit which determines the availability of updates for each of the appliances in a local network. Thus, in view of the teaching of Takahashi and the state of the art, one of ordinary skill in the art would be motivated to incorporate a home server in Fitzpatrick's invention to determine the availability of updates for each of the set top boxes in the cable network in order to provide a centralized surveillance and control of software updates for the set top boxes (*see Takahashi – Column 1: 49-52*).

Second, with respect to the Applicant's assertion that Takahashi does not provide a motivation to combine with Fitzpatrick because Takahashi requires the monitoring apparatus to store in advance a plurality of program files for each CPU, unlike Fitzpatrick which downloads information and determines whether the downloaded data should be installed, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the

Examiner respectfully submits that Fitzpatrick is within the field of the Applicant's endeavor and hence is analogous prior art because Fitzpatrick's invention is directed to an apparatus and a method of downloading code to at least one remote unit on a network having a plurality of remote units (*see Paragraph [0007]*). Takahashi is also within the field of the Applicant's endeavor and hence is analogous prior art because Takahashi's invention is directed to a communication system comprising a plurality of network elements and a monitoring apparatus for centrally monitoring and controlling these network elements (*see Abstract*). Therefore, it is permissible to combine the teaching of Takahashi into the teaching of Fitzpatrick to include the limitations disclosed by Takahashi since Takahashi provides a reason for combining the elements in the manner claimed. See MPEP § 2141.01(a).

Third, as previously pointed out in the Final Rejection (mailed on 03/31/2008) and further clarified hereinafter, the Examiner further submits that both Fitzpatrick and Takahashi are concerned with transferring software updates to a plurality of networked devices. Fitzpatrick teaches transferring software update from a service provider head end to set top boxes connected to the cable network. However, Fitzpatrick does not teach a central server that determines which set top box in the cable network requires a software update. Takahashi teaches a central server that determines which network element in the network requires a software update. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Takahashi into the teaching of Fitzpatrick to include wherein the home server is a centralized local home server, which determines which one of home appliances in the local home network require a software update. The modification would be obvious

because one of ordinary skill in the art would be motivated to provide a centralized surveillance and control of software updates for the set top boxes (*see Takahashi – Column 1: 49-52*).

Therefore, for at least the reasons set forth above, the rejection made under 35 U.S.C. § 103(a) with respect to Claim 4 is proper and therefore, maintained.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Q. C./

Examiner, Art Unit 2191

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191